

CIRCUITRY AND SYSTEMS FOR PERFORMING TWO-DIMENSIONAL MOTION
COMPENSATION USING A THREE-DIMENSIONAL PIPELINE
AND METHODS OF OPERATING THE SAME

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ABSTRACT OF THE DISCLOSURE

10 The present invention introduces circuitry and systems for performing two-dimensional motion compensation using a three-dimensional pipeline, as well as methods of operating the same. According to an exemplary embodiment, image processing circuitry is provided and includes both a two-dimensional image pipeline, which is operable to process two dimensional image data to generate successive two-dimensional image frames, and a three-dimensional image pipeline, which is operable to process three-dimensional image data to render successive three-dimensional image frames.

15 The image processing circuitry further includes dual mode sub-processing circuitry, which is associated with each of the two- and three-dimensional image pipelines. The dual mode sub-processing circuitry is operable to perform motion compensation operations associated with the two-dimensional image pipeline in one mode and

20 to perform rasterization operations associated the three-dimensional image pipeline in another mode.